

REPLY BRIEF	
First Named Inventor: Philip D. Nguyen	Docket Number: 2002-IP-006415U1P1D2
Application Number: 10/777,412	Art Unit: 1762
Filing Date: February 12, 2004	Examiner: Daniel S. Metzmaier
Title: Method of Tracking Fluids Produced from Various Zones in Subterranean Well	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir,

Pursuant to 37 C.F.R. § 41.37, please consider the following Reply Brief in the above-referenced application currently before the Board of Patent Appeals and Interferences. The period for reply expires two months from the Examiner's Answer that was dated March 16, 2011. Thus, this Reply is timely filed on or before May 16, 2011.

I. STATUS OF CLAIMS

The present application, Serial No. 10/777,412 (hereinafter “the Application”), was filed February 12, 2004 and included claims 1–28. Twenty-five additional claims have been added. Thirty-seven claims have been cancelled. Four claims have been withdrawn. Claims 21, 29, 31, and 44-53 are finally rejected and form the basis of the present appeal. A listing of all appealed claims was provided in Appendix A of the original Appeal Brief.

II. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 21, 29, 31, and 44-53 are unpatentable under 35 U.S.C. § 102(b) over U.S. Patent No. 5,582,250 to Constien *et al.* (hereinafter “*Constien*”).

2. Whether claims 21, 29, 31, and 44-53 are unpatentable under 35 U.S.C § 103(a) over *Constien*.

III. SUPPLEMENTAL ARGUMENT IN REPLY

A. Claim Interpretation

1. “Coated”

The Examiner’s Answer states that Appellants’ arguments for the standard of claim interpretation during prosecution are unpersuasive and goes on to state a number of disparate facts in support of that assertion. (See Answer at pp. 11-15). The Federal Circuit has recently clarified the standard for claim interpretation during prosecution in *In re Suitco Surface*. The Court notes that “[t]he broadest-construction rubric coupled with the term ‘comprising’ does not give the PTO an unfettered license to interpret claims to embrace anything remotely related to the claimed invention. Rather, claims should always be read in light of the specification and teachings in the patent.” (See *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1260 (Fed. Cir. 2010)).

With respect to the term “coated,” Appellants first note that the Examiner’s Answer appears to indicate that he is no longer reading out the term “coated” as a product-by-process limitation by stating that he “has given each limitation patentable weight consistent with the disclosure.” (See Answer at p. 13). While it is unclear what the clause “consistent with the disclosure” means here, Appellants thank the Examiner for withdrawing the argument that the claims present a product-by-process limitation.

Beyond the product-by-process issue, the Examiner seems to be equating “coated” with simply “mixed” or “blended;” such an interpretation is inconsistent with the specification. By way of example, the specification notes that “[c]urrent techniques for controlling the flowback of proppants include coating the proppants with curable resin, or blending the proppants with fibrous materials, tackifying agents or deformable particulates.” (See [0006]). Moreover, the specification states: “For proppant to be coated with a curable resin, the tracer agent is blended homogeneously with the resin

mixture and the resin is then coated onto the proppant. The proppant can be pre-coated as in the case of curable resin-coated proppants, for example, such as those commercially available from Santrol or Acme Borden, or it can be coated on-the-fly during the fracturing job treatment.” (See [0015]). A plain reading of this disclosure clearly states that coating can include pre-coating (wherein the proppant is purchased with the coating already in place) or on-the-fly (wherein the proppant is coated at the well site and then immediately placed into the treatment fluid). The Answer dismissed this disclosure in paragraph [0015] and the reference to Dewprashad *et al.* as mere examples that do not limit the claim. (See Answer at p. 14). While specific examples cannot be read into the claim from the specification, by ignoring any particular words in the disclosure, the Examiner is in effect asserting that none of the disclosure can be used to inform the meaning of the claims, because all of the disclosure is merely “an example.” (See *id.*). This is not the law.

Further evidence that “coated” cannot be read as equivalent to “mixed” or “blended” in view of the pending specification can be found at paragraphs [0017] and [0018]. In paragraph [0017], the specification describes the fact that in some embodiments “the proppant can be coated with phosphorescent, fluorescent, or photoluminescent pigments.” Similarly, in paragraph [0018] the specification describes the fact that in some embodiments “proppant materials having a naturally dark color can be dyed or coated with a marker.” The term “coated” here is not used in a manner distinct from the use of the term throughout the specification. In fact, a term should be construed consistently throughout the specification and the claims. (*Southwall Technologies, Inc. v. Cardinal Ig Company*, 54 F.3d 1570, 1579 (noting that “claim terms must be interpreted consistently”) (citing *Fonar Corp. v. Johnson & Johnson*, 821 F.2d 627, 632)). It would render the invention inoperable for its purpose to simply mix

or blend a phosphorescent, fluorescent, or photoluminescent pigment or a dye or marker into a treatment fluid having particulates therein. There would be no reason to suspect or believe that the pigment or dye would not simply attach to the well equipment or to formation fines within the environment and, at the least, the tracking function of the pigment or dye would be rendered useless and unreliable if the proppant itself was not coated. Thus, the construction of “coated” as equivalent to “mixed” or “blended” is improper when read in light of the specification. Rather, the term coated should be construed as having its plain meaning in view of the specification as “having a layer or cover applied thereto.”

2. “Resin”

With respect to the term “resin,” the instant application teaches that a resin may be used to attach a tracking material to a particulate, such as proppant. (See *e.g.*, Original Claim 14, and paragraphs [0013], [0015], and [0017]). The embodiments using resin make it clear that the resin acts to hold the tracking material (such as pigment or dye) to the particulate such that if the particulate is produced from the formation after being placed it can be traced. (See paragraphs [0013], [0015], and [0017]). To equate the resin described in these embodiments to a “water soluble interpolpolymer” would render the invention inoperable. That is, a “water soluble” polymer would, by definition, dissolve into water present either in the formation or the treatment fluid and then the tracking material would be released from the particulate and would be useless for tracking particulate migration. Further, equating “resin” with a “water soluble interpolpolymer” would be consistent with the fact that the term “resin” is used in the specification interchangeably with “curable resin.” (See paragraphs [0013], [0015], and [0017]; see *e.g.*, paragraph [0015] (noting “[f]or proppant to be coated with a curable resin, the tracer agent is blended homogeneously with the resin mixture and the resin is

then coated onto”)). Thus the ordinary meaning of a “resin composition” to one of ordinary skill in the art would be construed as a curable material, not a material that would dissolve in water.

B. The pending claims are not anticipated by or obvious in view of *Constien*

Consistent with the claim interpretations described above, *Constien*’s disclosure of simply mixing a particulate material into a fluid viscosified with a water dispersible interpolymer does not meet the claim limitations of either “coated” or “resin.” (See *Constien* at col. 4, ll. 41-45 and ll. 61-63). Mere mixing is not equivalent to “coated,” as noted above. Moreover, the viscosifying agents in *Constien* interact with treatment fluid to dissolve to add viscosity because it is soluble in, and remains in, the aqueous phase of the treatment fluid. A resin does not viscosify a fluid and, as noted above, the resin of the claimed invention would be inoperable if it dissolved into the treatment fluid. Therefore, the disclosure of a viscosifying agent does not anticipate the use of the claimed resin.

Therefore, Appellants respectfully assert that the pending claims are not anticipated by or obvious in view of *Constien*. Accordingly, Appellants respectfully request reversal of these rejections.

CONCLUSION

In light of the above remarks and the remarks submitted in Appellants Appeal Brief filed on July 27, 2010, Appellants respectfully request reconsideration and withdrawal of the outstanding rejections. Appellants further submit that the application is now in condition for allowance, and earnestly solicit timely notice of the same.

Appellants believe that no fees are due in association with this Reply. Should the Commissioner deem that any fees are due, including any fees for extensions of

time, Appellants respectfully request that the Commissioner accept this as a Petition
Therefore, and direct that any additional fees be charged to McDermott Will & Emery's
Deposit Account No. 500417, Order Number 086108-0329.

Respectfully submitted,

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